



Immediate Reach, Immediate Power

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IMMEDIATE REACH, IMMEDIATE POWER:

**The Air Expeditionary Force
and American Power Projection
in the Post Cold War Era**

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Richard G. Davis

AIR FORCE *History and Museums* PROGRAM

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What is an Air Expeditionary Force?

I have heard the lament that, "the Air Force is not what it used to be during the Cold War," and I must tell you that it is absolutely true; this "ain't" our fathers' Air Force. As the world around us changes, so must all the services, including the Air Force.

Gen. Michael E. Ryan, U.S. Air Force Chief of Staff

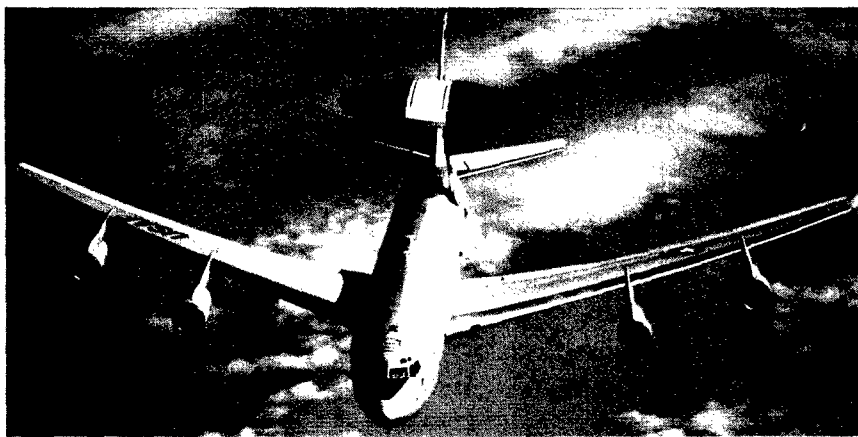
The multiple challenges America faces today calls for rapid responsive, global air power. The answer is the United States Air Force's (USAF) Air Expeditionary Force (AEF). An AEF consists of aircraft wings, groups, or squadrons attached to a USAF numbered air force deployed under the command of a U.S. Military Joint Commander-in-Chief (CINC) of a geographic region, during a period of increased operations tempo. An increased operations tempo is invariably associated with U.S. diplomatic, political, military or humanitarian actions either underway or in prospect. Also, an AEF unit deploys as a composite force, one made up several different aircraft types within the same unit, rather than in accordance with past USAF practice where a combat unit consists of only one type (and model) of aircraft. By taking advantage of the intrinsic strengths of air power—speed, range, and flexibility—the AEF provides a logistically lean, flexible, tailored, quick-response force to the CINC.



Composite force of F-15C, F-15Es, and F-16s fly over Iraqi air base. Note the holes made by USAF precision weapons on the roofs of the hardened aircraft shelters

The flexibility of air power enables its possessor to undertake or threaten a wide range of responses, such as precision or mass attack against selected individual targets or entire target systems deep in enemy occupied territory or on the line of contact with friendly forces; almost simultaneous action against the width and breadth of a hostile land; electronic observation and intelligence gathering of the land, sea, and air capabilities of an opponent in a crisis or combat situation; and the threat of immediate force to deter hostile action. Furthermore, in times of natural disaster or internal conflict, air power can airlift life-saving supplies to victims or refugees and evacuate American or other nationals from danger. The unparalleled mix of aircraft types available to the Air Force enables it to make maximum use of its assets to tailor the structure of an AEF, and, if necessary, follow-on AEFs, to fit the specific task or tasks required. Finally, unlike land or sea power, air power can reach any spot on the globe within a few hours. Given some pre-positioning of matériel, initiation of pre-planned airlift, and host nation permission, an AEF can place bombs on target or commence other appropriate actions within 72 hours of warning. This 72-hour period assumes 24 hours of strategic warning with bombs on target 48 hours after the order to execute the mission has been received from the Joint Chiefs of Staff.

Since its inception in 1907, American military air power has repeatedly demonstrated its value to the nation via its ability to respond flexibly to various crises. This response has evolved according to the dictates of changing mission requirements and in many cases has forced the service to change its culture and to refine its *raison d'être*. Like any organization, a military service must adapt to changes in its environment or perish. A service which focuses on its last war, instead of its next one, may find itself fatally handicapped.



E-3 Airborne Warning and Control System (AWACS) aircraft, such as this, may form part of an Information AEF.



The electronic suite of an EC-130 VOLENT SOLO psychological warfare aircraft.

In the years between the two world wars and in World War II, Air Force thought, doctrine, and organization centered on the idea of conventional strategic bombardment. This organizing principle rested on the foundation of a large industrial base, which would have time to mobilize, and on the acquisition of foreign alliances which would enable American military air power to occupy bases in other countries from which to attack the war economies of enemy nations. With the advent of nuclear weapons, the organizing principle of the USAF changed to deterrence. In the early years of the Cold War, 1947 to 1973, the elite Strategic Air Command (SAC) with its armada of heavy bombers and fleet of intercontinental ballistic missiles, served as the service's linchpin and as a major support of the nation's foreign policy. In the later years of the Cold War, 1974-1990, many factors, such as the Strategic Arms Limitation Treaty, the close of the war in Vietnam, the switch to an all volunteer military, and a substantial increase in international terrorism, led to a shift in emphasis from nuclear based deterrence to a more conventional orientation. Throughout the Cold War, nuclear weapons, a large domestic base and force structure, and a system of permanent foreign treaty alliances (which provided large, well established, and usually secure, foreign operating bases with U.S. garrisons) formed the bedrock which underlay the principle of deterrence. With the end of the Cold War and its garrison mentality the Air Force has new missions and requires a different organizing philosophy.

The shift from a deterrent Air Force to an expeditionary Air and Space Force recognizes current geographic and political realities. Air Force leaders, including both former Chief of Staff, Gen. Ronald R.

Fogleman, and current Chief of Staff Gen. Michael E. Ryan, have espoused the AEF as the new organizing principle for doctrine and service culture. As with past U.S. wars, the end of Cold War brought demobilization, although not to the pell-mell extent of active conflicts. In this post-Cold War environment, where the United States is limited in its ability to locate forces on a permanent basis overseas, the AEF represents an imaginative means of deploying forces and projecting power and presence quickly around the globe. This is ideally suited to an era in which the U.S. has assumed an increasing role in assuring global stability.

In short, the AEF provides an excellent solution to current geopolitical constraints. Its components are permanently housed on existing bases in the continental U.S. (CONUS), in Europe, or the Pacific region. An AEF can deploy rapidly because its designated component units will be in a ready posture that enables them to move immediately upon receipt of orders from the Chairman of the Joint Chiefs of Staff. (Units in a ready posture have their personnel on call or in an alert status. They also have their equipment ready to be packaged onto pallets configured for the appropriate airlift aircraft, when they arrive at the unit's home base.) In addition, AEF planners survey possible destination bases and stock them with the required pre-positioned equipment and munitions. (Pre-surveyed bases speed the physical process of occupying and setting up the new base, known as beddown, and pre-positioned heavy equipment, such as fuel and fire fighting trucks, and a few days' supply of munitions on hand, reduce the requirements for airlift, while enabling a high rate of operations as soon as possible.) In most cases the movement itself follows routes already planned and prepared by the Air Mobility Command. The



Fuel bladders, such as these, are part of the prepositioned equipment for an AEF.

Mobility Command has dubbed these canned deployment plans, "play-books." They are vital to speedy deployment because they establish a coordinated air bridge of tankers and airlift from home bases and logistics centers to the area of operations.

When an AEF deploys it does so in a package designed to have the smallest possible "footprint" necessary to perform its assigned task. A force's "footprint" consists of the manpower and equipment required at its operating location to maintain its activities. The footprint consists of combat and support personnel (such as ground crews, medical, communications, limited administrative personnel, and security police), essential ground support equipment, base operating equipment, and housing facilities. The model AEF consists of approximately 30 combat aircraft, 1,200 personnel, and associated equipment stationed in the host nation. In its combat configuration an AEF is expected to be able to execute 70 to 80 sorties a day, a force level comparable to that of a U.S. Navy aircraft carrier. A lead wing, designated by the appropriate USAF numbered air force, supplies the command and control component of an AEF. Because of current limitations on temporary duty assignments away from their home bases, the designation of lead wings and detachments from other wings rotates throughout the year. This ensures that in the normal flow of events, a unit spends no more than 120 consecutive days temporarily stationed overseas. A longer deployment would place greater strain on personnel and their families.

Once the AEF concept is fully implemented, the USAF hopes to further minimize the force's footprint by extensive use of lean logistics, dynamic planning, and "distributed" force structure. For example, in a distributed headquarters certain elements would physically remain at different locations in the U.S., while being closely connected via electronic means to smaller portions of the headquarters in the area of operations. Recent advances in electronics may actually enable many air control, navigational, and intelligence functions to remain in the U.S. while still providing accurate on-time information to units in theater. Other advances have reduced the bulk of communications and other electronic facilities enabling them to deploy with far less airlift. A small footprint enables deployment to all areas of the world, reduces airlift requirements, diminishes considerations of physical security, eases the financial burden on the U.S., and decreases the financial and political burden on the host nation.

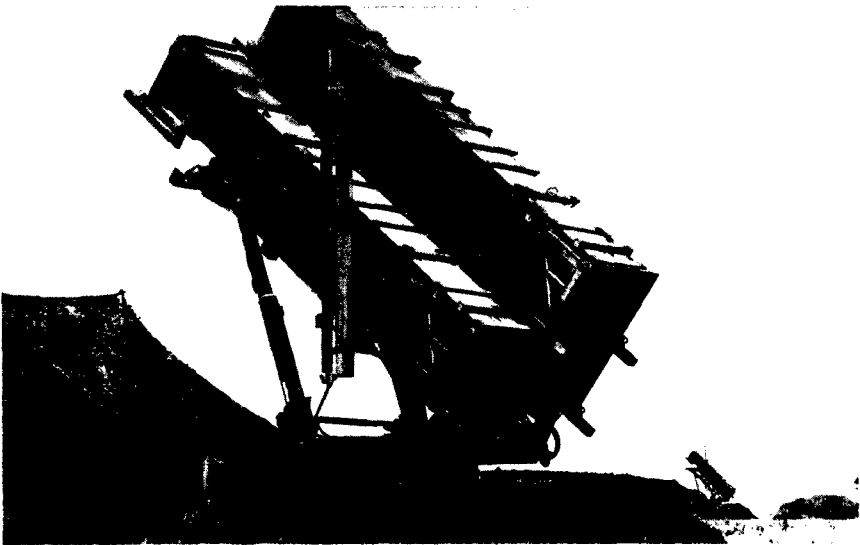
Some portions of an AEF may avoid altogether the problems of deployment. B-2 and B-52 bombers, flying ultra-long-range missions, as they did in the Gulf War and employing long-range stand-off munitions, such as the air launched cruise missile, can conduct operations from their home bases in CONUS. These bombers can maintain close, simultaneous (real-time), electronic links with the planning, targeting, and command portions of a deployed AEF. Given double-crewing at their bases, to relieve the strain of missions lasting much of the day, such aircraft could

offer effective deterrence or perform combat operations without sacrificing the security, logistics, and maintenance facilities of their home bases.



Air-to-air refueling would allow this B-1B bomber to fly missions from its U.S. home base and return.

As currently formulated, an AEF is primarily a USAF force, although there is no intrinsic reason that it could not at some future date include U.S. Marine Corps and Navy aircraft should the situation warrant. A U.S. Army Patriot missile battery is already scheduled to deploy as a standard portion of an AEF's base protection. Given that air power is an important component of each of the U.S. services, a force consisting of Marine Harrier ground attack aircraft, Navy EA-6 electronic warfare planes, USAF F-15C air-to-air fighters, and USAF F-16s equipped with precision guided munitions is possible.

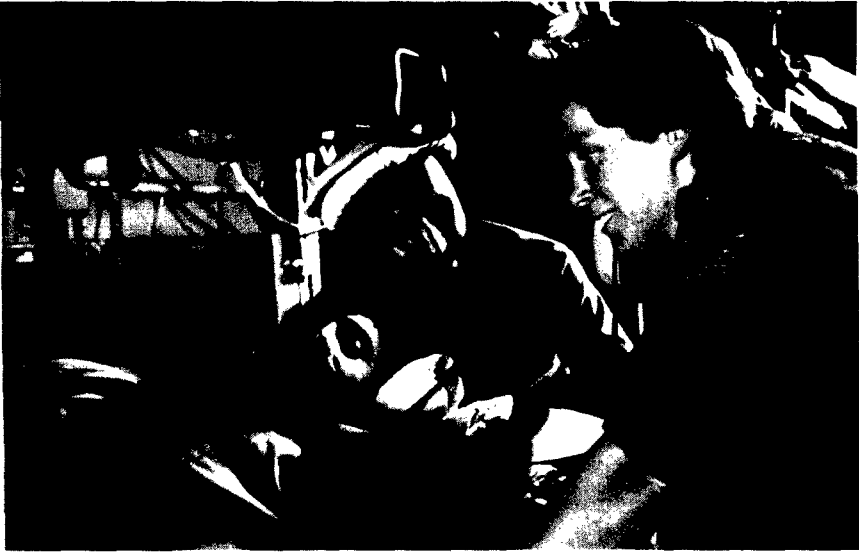


U.S. Army Patriot missile defense systems will deploy with an AEF.

An AEF "belongs" to the CINC in whose area of responsibility it serves. The Air Force trains, equips, and fields the unit, but the CINC controls it. For an AEF to reach maximum effectiveness, each CINC must fully integrate the AEF concept into the air component of his command. This may mean significant changes in the CINC's deployment and pre-crisis planning. Instead of planning for a flow of separate wings and squadrons, each composed of the same type of aircraft, the CINC, his staff, and his air component will have the opportunity (and responsibility) to plan for one or more composite forces tailored specifically to the tasks at hand. They will have to change or modify pre-positioning plans constructed around having only one model of aircraft occupy a base to fit a composite force consisting of several aircraft types. In addition, experience has repeatedly demonstrated that detailed deployment planning breaks down almost the instant the deployment order is given, as unanticipated events and changes in priority combine to wreck pre-crisis expectations. The flexibility of the AEF concept should make it an instrument of military force more responsive to the CINC's needs than traditionally configured units that arrive piecemeal or without vital equipment.

An AEF's operations may begin before its first aircraft have even landed in the CINC's area, if that aircraft departed the U.S. armed and briefed to attack a target en route. The Joint Force Air Component Commander (JFACC) and his staff supplies the AEF with the daily Air Tasking Order, which integrates the AEF into the theater's air operations, air defense, and air control regimes. Since an AEF lead wing is chosen for temporary duty considerations, rather than geographic expertise, the CINC supplies his AEF with base surveys and the required targeting information. His rules of engagement and target selection reflects not just the dictates of the national command authorities, but the capabilities of the AEF he has requested. The AEF concept strengthens the CINC's in coping with the short notice and/or unanticipated natural disasters and events that almost inevitably happen. In responding to populations struck by a ferocious cyclonic storm in South Asia or to American citizens needing airlift to escape a civil war, the CINC will have immediately in hand an instrument capable of answering his needs in the shortest possible time.

Although the AEF concept has already shown its value and potential in a series of deployments to the Middle East, it remains "a work in progress." The service has not yet fully realized, explored, and implemented the idea. However, it has already changed its training and professional military education curricula to reflect current thinking on the AEF. Likewise, it has revised Air Force Doctrine Document No. 1 (AFDD-1) the service's keystone statement of doctrine. In further actions the service has allocated \$40 million for an AEF experimental exercise, to be held in September 1998, and revised its "flag" operations exercises. Red Flag and other operational exercises stress the USAF's commitment to train as it



A humanitarian AEF can provide aid and comfort to those who need it, such as these Afghanistani freedom fighters evacuated for advanced medical care.

will fight. At a service-wide conference held in Washington, DC, at the end of January 1998, the Air Force established a comprehensive AEF implementation plan, consisting of over sixty individual items. Most of these efforts began in February 1998 and were to finish in June 1998 or later. They included initiatives to develop concepts of operations for deployment of bombers, air information AEFs, humanitarian relief AEFs, force protection, logistics, and strategic air mobility. In addition, the implementation plan assigned to the appropriate portions of the service the responsibility of creating or analyzing incorporation of the AEF into CINC planning documents; integrating space assets into the AEF; preparing metrics to track and measure AEF performance, training and readiness; updating defense planning guidance to include AEF concepts; staging AEF demonstrations; and focusing USAF research, technology, and investments on expeditionary concepts.

A final crucial aspect of the AEF is implicit, but not stressed, in the official formulation. An AEF is ready. It is fully trained and equipped, proficient in the use and employment of its weapons and machines, and manned by long-service, experienced, professional personnel.

Readiness, Responsiveness, Flexibility, and the Historical Roots of the AEF Concept

Although the AEF is a major step in recasting the outlook and culture of the USAF, it springs from the performance of missions tradition-

ally performed by the Air Force—the timely response of land-based air power to the needs of the nation.

In many cases, in twentieth century warfare, speedy deployment, flexibility, and readiness have competed against each other rather than worked together in a single package. The pre-World War I mobilization schemes of the European powers provide a classic example of such antagonism. In order to assure the quickest possible fielding of their ground combat forces they locked their armies into giant, but completely inflexible, war plans. Military commanders made it clear to their civilian leadership that any compromise of the detailed time schedules involved in massing forces for the defense of the nation would have disastrous consequences. This consideration was one of the key factors in thwarting diplomatic attempts to end the pre-war crisis short of open hostilities. Once the Russians announced their mobilization (they had the longest time-table and were thus under the greatest pressure to move first) their potential enemies felt they had little choice but to respond. Once the rush to field the armies began, Germany's von Schlieffen Plan proved the most efficient and most ruinous of all, for it specified an offensive against France, not Russia, and necessitated the violation of Belgian neutrality, which brought Britain into the war against Germany. The inflexibility of Germany's initial deployment scheme eventually led to its own defeat.

On the other side of the Atlantic Ocean, the very first use of American military aircraft to support combat operations occurred during Brig. Gen. John J. Pershing's Punitive Expedition into Mexico in 1916. The Army's Aviation Section supplied aerial reconnaissance and learned hard lessons concerning the fragility of aircraft operating at a distance from major airfields and about the necessity of proper equipment for aircraft ground support elements. Once the U.S. entered World War I, its almost total lack of military preparedness and readily deployable armed forces greatly delayed operations to support our Allies. Although the U.S. declared war on the Central Powers on April 17, 1917, its first infantry units, composed of pre-war regulars, not conscripts, did not enter the front lines until October 20, 1917, and then only in quiet sectors for training purposes. Not until September 1918 would U.S. air power, in the form of American pilots flying aircraft of French and British manufacture, make a significant impact.

The short notice humanitarian, presence, and airlift aspects of the AEF also have a long history, going back to the period between the two world wars, when the Army Air Corps conducted airdrops of feed to cattle stranded in winter storms, flew goodwill missions to Latin America, and blazed the air route to Alaska.

The Japanese sneak attacks on Pearl Harbor and the Philippines in December 1941 thrust the U.S. into the Second World War, caught the Army Air Forces in the midst of expansion and destroyed its most combat-ready forces. The inability to rapidly respond with adequate air power

hampered the nation's early efforts. Operations against Germany did not begin until June 1942, six months after the start of the war, when a single squadron of 12 B-24s bombed the Ploesti oil fields in Rumania. The first heavy bomber of the U.S. Eighth Air Force, which would later bring the Nazis to their knees with strategic bombing, did not arrive in England until July 2, 1942 and the Eighth did not fly its first heavy bomber combat mission until August 17, 1942. Of course, a ready force of three or four heavy bombardment groups would probably have made little difference in the overall progress of the war. In any case, it was impossible due to the small pre-war force and the late start in rearmament. Still, such a force might have inflicted substantial damage to a few key targets and would have been a powerful boost to American and Allied morale. U.S. ground forces did not see action in the European theater until the invasion of French North Africa on November 8, 1942.

In late 1943, General Henry H. "Hap" Arnold, commander of the Army Air Forces, established three Air Commando Groups, two served in Burma and one in the Philippines. Their task was to lift, supply, and support deep insertion ground forces behind Japanese lines. The commando groups anticipated the AEF concept in that they worked in a joint or combined setting and were groups composed of mixed types of aircraft: fighters, medium bombers, transports, and gliders. Two groups, under the close supervision of the Commander-in-Chief, South East Asia Command, Earl Montbatten, worked in extremely close cooperation with U.S. Army and British ground units. In conjunction with ground formations, such as Merrill's Marauders and Wingate's Raiders, they proved devastatingly effective in disrupting Japanese operations.

Ironically, the creation of the USAF as an independent military service in September 1947 marked the midpoint of a period of precipitous decline in force structure, procurement, and operations and maintenance funding that occurred between the hurried demobilization after World War II and the outbreak of the Korean War. The Air Force of June 1950 was but a shadow of the mighty weapon of August 1945. The service's response to the North Korean invasion of the South demonstrated the state of its overall readiness. The Far East Air Forces found itself hampered by lack of airlift and bombardment aircraft, poor training, and the total absence of jet capable airfields in South Korea. Even so, it flew its first combat mission on the night of June 27/28, within 24 hours on the decision of the United Nations Organization and the U.S. government to come to the aid of South Korea. U.S. naval aircraft flying from the carriers of Task Force 77 struck targets in North Korea on July 3 and the first U.S. ground forces, Task Force Baker formed from troops in Japan, entered into combat on July 5, 1950. Reinforcement from the continental U.S. by B-29s was relatively swift, in great part because they were in bomb groups belonging to SAC. Because it had the monopoly for U.S. nuclear deterrent, SAC had the nation's highest funding priorities and was, there-

fore, better trained and had conducted pre-war planning and exercises in foreign deployments. Nonetheless, the units from SAC did not fly their first combat mission until August 7, 1950—seven weeks after the start of the conflict. However, the arrival of U.S. based aircraft and ground control equipment of the USAF's Tactical Air Command (TAC), which would conduct and direct the bulk of the interdiction, air superiority, and close air support for the U.S. and allied armies, took far longer. TAC had gotten the short end of the funding priorities. The first aircraft shipped from TAC, a reserve wing of B-26 bombers, began operations on October 27, 1950. Lack of both an air-to-air refueling capability and a string of ready air bases for ferrying led TAC to ship some of its obsolescent F-51s as well as some of its state-of-the-art F-86s across the Pacific on U.S. Navy aircraft carriers, a misuse of flight decks that pleased neither service. Air attack in the summer of 1950 played a vital role in delaying, disrupting, and helping to halt the North Korean assault. Had the AEF concept been in existence its rapid, ready deployment may have proven of even greater assistance. Such a force placed in the hands of General of the Army Douglas A. MacArthur, Commander-in-Chief Far East, might have further slowed the North Korean advance and eased subsequent operations.

The painfully slow response to the outbreak of the Korean War led to the USAF's first attempt to institutionalize a rapid response force. Soon after the end of that war in 1953, TAC began to experiment with fielding a quick response force to bases with minimal facilities and to develop an air refueling capacity for its fighter aircraft. From these initiatives, TAC developed the Composite Air Strike Force (CASF), a small tactical air force composed of a command element, fighter, reconnaissance, tanker, troop carrier, and communications support units. While it could fight, if necessary, the principal function of the CASF was to deter Communist aggression in such areas the Middle East or Latin America outside the reach of American forces already stationed overseas. Its primary characteristic was fast reaction and it would be as self-sufficient as possible. Each of its elements would prepare and store fly-away kits of spare parts and supplies, and each of its members would have specific deployment tasks assigned. Upon arrival in theater, the unit would be able to sustain operation for 30 days on minimum logistics support, with the addition of required food, fuel, and munitions. Air-to-air refueling not only made rapid response possible, it enabled the various elements of the CASF to maintain themselves economically on their home bases until the need to deploy arose. Once the CASF concept was fully implemented and tested, by the late 1950s, the first strike elements of a CASF could arrive in the Middle East within 16 hours of notification with the total force in-place and ready for operations in 48 hours. In the Far East the lead elements would arrive within 36 hours with the full force in operational status within 72 hours. On July 8, 1955, TAC activated the command element of the CASF, the Nineteenth Air Force.

The headquarters of the Nineteenth Air Force was one of the most unusual air units ever created. It had no permanently assigned aircraft or combat units. Nor, since it was an operational headquarters only, did it have any units or bases to supervise, train, or inspect. When not deployed the Nineteenth had a close working relationship with the Ninth Air Force*, which supported its administrative functions with many of its own people. These circumstances allowed the Nineteenth to limit its staff to approximately 85 military and 6 civilian personnel. Its mission was to prepare contingency plans for and command of short notice deployments of the CASF anywhere in the world. It required each of its members to be ready for instant departure from the U.S. and its staff sections maintained 30-day fly-away kits ready for shipment. The Nineteenth worked closely with U.S. Army contingency units and at one point a third of its staff was "jump qualified" or able to parachute in with U.S. Army airborne troops. In the event of a crisis the Nineteenth (working from a prepared plan, which designated specific units, travel routes, en route support, and timing) would take command of the deploying CASF and serve as part of a joint task force, or as a senior air command, or as a component command. At first glance the Nineteenth had a normal headquarters organization with major sections for planning, operations, and logistics. However, these sections had an important secondary function; each served as the lead command element for various geographical contingencies. The plans section would head European and Middle Eastern deployments, while the operations section would lead those to the Pacific, and the logistics section those to Latin America, the Caribbean and Africa. This unique arrangement allowed for continuity of planning and expertise and helped to overcome some of the disadvantages inherent in the U.S. armed forces policy of churning personnel through different assignments every three or so years. Within the service the Nineteenth soon earned the nickname "The Suitcase Air Force."

In keeping with its mission of deterrence a CASF, in theory, consisted of three task forces, each of which could vary in size and composition according to the assigned task. The first task force had only a limited combat capability and consisted of a show-the-flag or a good-will package. It could fulfill the role of "gunboat diplomacy." A force such as this went to Turkey, Iran, and Pakistan (Operation QUICK SPAN) in February 1960. The second task force consisted of the basic CASF combat element and would serve as the initial force for a small war. TAC kept the units of the second task force on a progressive 24 hour alert system and planned for the first portions to move within four hours of alert and

*In its first two years the Nineteenth was directly attached to the Ninth. In July 1957 it moved to the direct control of TAC headquarters, but it maintained its working relationship with the Ninth Air Force, whose support enabled the Nineteenth to retain its small footprint.

to deploy the entire force in 24 hours. The third task force, composed of additional fighter squadrons would augment the second if the situation required expansion of the force.

Before its demise in 1973, for reasons of economy, the Nineteenth Air Force participated in several domestic and foreign contingencies. In 1958 the CASF concept underwent its most severe test. On July 15, 1958 President Eisenhower, acting at the request of the Lebanese government, sent the Marines into Beirut to help preserve that small country from a wave of popular discontent sweeping the Middle East, toppling monarchies in Syria and Iraq and replacing them with military regimes hostile to U.S. interests. To support the Marines the national command authorities alerted the CASF. Within three hours B-57 tactical bombers left their bases for the only friendly major operating airfield in the region, Adana Air Base, Turkey, fifteen minutes flight time from Beirut. In another three hours TAC KB-50J tankers left their mid-Atlantic bases to refuel F-100s departing Myrtle Beach AFB, South Carolina, while RF-101s and RB-66s left Shaw AFB, South Carolina. Sixty C-130s ferried support personnel, spare parts, and equipment. Thirteen hours and 6,700 miles after the initial alert, the F-100s were taxiing to alert ramps at Adana. All aircraft deployed came from the Ninth Air Force. Within two days an under-utilized Turkish Air Force gunnery base had become an American air center, with an operations center manned by Nineteenth Air Force personnel (flown in on a single C-130) and integrated with Navy, Marine, and Army forces in the Middle East.

Since the entire Nineteenth Air Force headquarters had deployed to Lebanon, TAC ordered its Twelfth Air Force to form another command element similar to that of the Nineteenth, in case a further emergency should arise. Given the upsurge in tension between Communist Chinese government on the Asian mainland and the Nationalist Chinese regime on Taiwan, the new command element focused its planning on the Far East. The Chinese Communists had announced their intention to reincorporate a series of small Nationalist held islands within artillery range of the mainland, in particular the islands of Quemoy and Matsu. In the summer of 1958 the size and duration of their bombardments increased dramatically. The U.S. responded by supplying the Nationalists with tanks and new heavy and longer ranged artillery, as well as beefing up their own forces in the region. TAC placed a squadron of F-100s, transport aircraft loaded with supplies, parts, and equipment, and a communications and control squadron on alert. It also began to "lean forward," by sending tankers, weather men, maintenance crews, and control units to islands on the air route between California and Thirteenth Air Force Headquarters at Clark AB in the Philippine Islands. Late on August 29, 1958, the second CASF received the "go" order. The F-100s, carrying the Sidewinder heat-seeking, air-to-air missile, took off on August 30, spent that night at Hickham AFB, Hawaii, and the next night at Guam, where Typhoon

"Lola" delayed the movement for 24 hours. On September 2, they landed at Clark AB, after a flight of 9,500 miles and an elapsed time of 96 hours. RF-101s arrived soon after and C-130s formed an airlift bridge carrying support personnel, equipment, tools, and workstands to Clark. On September 5 and 6, the CASF, with much assistance from the both the Thirteenth Air Force and the Fifth Air Force in Japan, flew to a Nationalist air base on Taiwan, where they came under the control of a joint operations center established the day before by CASF personnel. Nine days later, a squadron of F-104s occupied another Nationalist air base. Two more fighter squadrons and one of B-57 bombers backed up this force. They assumed station at Kadena Air Base, Okinawa. The mission of all units was to defend the straits between Formosa and the mainland.

In both Lebanon and Taiwan the CASF succeeded in helping the U.S. gain its national objectives. Thanks, in part, to rapid deployment of lethal, ready force, the government of Lebanon remained in power and the Chinese Communists discontinued their offensive against Quemoy and Matsu.

In the fall of 1962 the Nineteenth participated in two significant deployments both within the U.S. In September, when racial tension in Oxford, Mississippi, over the integration of the state university, caused the federal government to send in troops, the personnel of the Nineteenth coordinated airlift activities. Then, in mid-October, the Nineteenth moved from its home base, Seymour Johnson AFB, North Carolina, to Homestead AFB, Florida. Once at Homestead, the Nineteenth spearheaded the deployment of TAC units at the beginning of the Cuban missile crisis. The Nineteenth's commander became head of the main air operations center, AFLANT ADVON (Air Force Atlantic Advanced Operational Nucleus), which was activated shortly after President Kennedy's speech declaring a quarantine of Soviet missile shipments into Cuba. Augmented by airmen and officers from other TAC air forces AFLANT ADVON soon controlled nearly 1,000 aircraft and 7,000 men and women. The Nineteenth returned to North Carolina in December 1962, when the crisis ended.

In 1963 the Nineteenth conducted two show-the-flag exercises. The first went to Saudi Arabia in early May. There the Nineteenth helped to train Saudi pilots and supervised a tactical demonstration at Jidda International Airport for 30,000 spectators, including Crown Prince Faisal, the prime minister, the foreign minister, and other royalty and officials. The second went to India in October. There, in Exercise Shiksha (sanskrit for training), the Nineteenth, in cooperation with the Royal Air Force and the Royal Australian Air Force, helped to improve Indian Air Force air defense capabilities and provided other tactical training. This effort was partially in response to the earlier division-sized Sino-Indian conflict. Throughout its existence, the Nineteenth also participated in numerous joint exercises within the U.S. as well as practice alerts.

For practical purposes, the war in Vietnam ended the work of the Nineteenth, as that conflict absorbed a large proportion of the USAF's assets not directly dedicated to the nuclear deterrent and consequently lessened the nation's ability to intervene in other crisis areas. The Nineteenth went out of existence in July 1973, shortly before the Yom Kippur War, where it might have proved of use in overseeing the U.S. resupply effort to Israel. In addition to its crisis management, the Nineteenth left an enduring legacy to the USAF. It was through the efforts and requirements of the Nineteenth that the service developed the Airborne Command, Control, and Communications (ABCCC) aircraft, which has proved of inestimable value in providing an airborne headquarters in crisis situations for more than thirty years.

Although not conducted by the Nineteenth, the dispatch to the Republic of Vietnam of the first USAF detachment to fight as an intact combat unit, as opposed to an purely advisory unit, once again illustrated how leisurely such movements could be. President Kennedy ordered a squadron sized force of 155 personnel, designated as Farm Gate, to South Vietnam on October 11, 1961. It consisted of a composite force of older piston-engined, T-28 trainer/ground attack aircraft, B-26 attack bombers, and C-47 transports. Its lead elements left Eglin AFB, Florida, on November 5 and arrived in Vietnam on November 16. Its final combat element did not join the unit until the end of December 1961.

With the demise of the Nineteenth, the end of the war in Vietnam, the switch to an all volunteer force, and the severe cost restraints of the mid and late 1970s, the quick reaction forces languished. Show of force operations continued, but at lower rates. For example in January 1979 the U.S. dispatched F-15Cs to Saudi Arabia in response to the fall of the Shah of Iran, though they were, by Presidential order, unarmed. Worse, on April, 24, 1980, when the U.S. attempted to rescue hostages taken by the Iranian Regime from the American embassy in Teheran, disaster struck. A ground collision, on a secret landing strip within Iran, resulted in eight dead and five wounded, causing the abandonment of the mission—a key lesson in how contingency planning must be thorough and complete. In this disaster and other experiences, such as the operation against the island of Grenada and the mishandling of the Marine expedition to Beirut, both in 1983, the three armed services demonstrated shortcomings in mutual cooperation. Dissatisfaction with these efforts helped lead to the National Defense Reform Act of 1985 (Goldwater-Nichols). This act attempted to institutionalize joint service actions. It greatly strengthened the role of the CINCs in planning and conducting their own operations and supplied the CINCs with designated operating headquarters for each of their components. This obviated the need for a service headquarters, such as the Nineteenth which would arrive on-the-fly to organize a CINC's air power.

The first crisis to test the new joint war fighting criteria instituted by Goldwater-Nichols arose in December 1989 with Operation JUST

CAUSE against Panamanian dictator Manuel Noriega, a major political-diplomatic problem, but a military "gnat" and an air power zero. A long simmering crisis gave the Americans several weeks to complete their preparations, in which U.S. Army and Special Forces planners took the lead, relegating the USAF planners to a supporting role. Nonetheless, while USAF F-117A stealth bombers staged a single demonstration raid (at the Army's express requirement), USAF gunships and transports made critical contributions by supporting Special Forces operations and supplying airlift for Army reinforcements. JUST CAUSE demanded neither the employment of significant USAF combat forces nor a quick start from a standing stop.

On August 1, 1990, the Iraqi seizure of Kuwait sparked a far more significant test of Goldwater-Nichols and of USAF rapid reaction. The U.S. response to Iraqi aggression, Operation DESERT SHIELD/DESERT STORM differed from Panamanian operations in many important aspects. The Iraqis posed an infinitely greater military challenge. Whereas the Americans had staged JUST CAUSE from CONUS bases and the U.S.-occupied Panama Canal Zone, the War in the Persian Gulf required basing permission from several nations in the Gulf, as well as transit permission and support from nations along the air routes to the Gulf. In comparison to approximately 50,000 troops involved in Panama, the Gulf would require almost 250,000 American military men and women in-theater or in support. This was the greatest American deployment since the war in Vietnam. Coalition partners combined to almost equal the American total. Lastly, the crisis came as a result of a strategic surprise rather than a long anticipated contingency.



As part of an AEF, tanker aircraft contribute to the mission's performance.

On the evening of August 6, 1990, King Fahd Ibn Abdul-Aziz of Saudi Arabia accepted an American offer of military assistance and granted U.S. forces basing privileges in his country. At that point the JCS ordered forces to begin deploying to the Persian Gulf. The initial combat force, a fully-armed squadron of the 1st Fighter Wing's F-15C air superiority fighters, on standby status since August 1, left its home field, Langley AFB, Virginia, on August 7 (5:25 pm EST) and touched down at King Abdul Aziz Royal Saudi Air Force Base (RSAFB), Dhahran, on August 8, 15 hours later and 34 hours after the deployment order. USAF Airborne Warning and Control System (AWACS) aircraft landing at Riyadh RSAFB beat the F-15Cs by three hours. Other aircraft flowed in until by August 10, 45 F-15Cs, 24 F-15E Strike Fighters (without precision munitions capability), 24 multi-role F-16s, and one EC-135 Rivet Joint electronic warfare aircraft were in theater. Seven B-52Gs, based in Diego Garcia, were available for combat by August 12. F-4G Wild Weasels for suppression of enemy air defenses flew into Shaikh Isa Air Field, on August 16, while precision munition capable F-117A stealth bombers landed in-theater on August 17, as did the initial ABCCC aircraft. A-10A attack aircraft reached the theater on August 20; EF-111 electronic counter-measure aircraft landed on August 24, and F-111F precision munition capable fighter bombers closed on the theater by August 26. Navy carrier task forces in the Mediterranean Sea and the Indian Ocean began to steam for the area on August 2, to join the Middle East Task Force already on permanently on station. The first Navy ships to depart CONUS, the battleship *Wisconsin* and its battle group, left on August 7. As for the U.S. Army, the lead elements of the ready brigade of the 82nd Airborne Division left Pope AFB, NC, via USAF airlift, on August 8, and arrived the next day to set up defensive positions. The entire brigade was in place by August 13. On August 10, the first ship to carry army tanks and heavy vehicles arrived at a U.S. port to begin loading for the 25-day voyage to Saudi Arabia. On August 14 USAF airlift brought in the beginning portions of the U.S. Marine Corps' 7th Marine Expeditionary Brigade. That 17,000 man force was ready for combat by August 26. When compared to earlier conflicts the U.S. armed forces had responded rapidly and with a ready force.

While the USAF had sent in a force capable of deterring or doing severe damage to any Iraqi forces seeking to invade Saudi Arabia, the flow of aircraft had not been entirely satisfactory nor had it taken full advantage of air power's inherent flexibility. The late appearance of the Wild Weasels and the stealth bombers would have denied those other aircraft conducting initial combat operations force protection assets and a safe and highly accurate deep strike potential. The lack of both these capabilities might have caused unnecessary casualties and lessened the overall effectiveness of the first air operations. By the outbreak of hostilities in January 1991 much larger components of the armed services had taken up station in the theater.

The Creation of the AEF Concept and its Use in Southwest Asia

The declining size of our military demands the abandonment of the business as usual mindset. Innovative thinking is key to reducing duplication and getting the most from our defense budget.

Dr. Sheila E. Widnall, Secretary of the Air Force, 1993-1997

As the largest post-Vietnam combat experience of the U.S. armed forces, the Gulf War supplied both an impetus for and valuable lessons applicable to the AEF concept. The war and its aftermath of Iraqi non-cooperation and intransigence has focused U.S. interest and forces in the area. The necessity of humanitarian relief for the Iraqi Kurds and the requirements of enforcing the no-fly zones in both northern and southern Iraq have increased the permanent presence of U.S. forces in the region. The Persian Gulf has also become the most likely region for future conflict and as such will keep the attention of planners and intelligence assets for the foreseeable future. As commitments grow, the force shrinks. In the six years since the end of the Gulf War each of the armed services has suffered substantial reductions in combat strength. No longer will the USAF be able to commit ten tactical fighter wings, as it did in 1991, to a single theater without seriously compromising its strength for any other contingency. It is this loss of overall capability that has inspired an increased need to achieve maximum efficient use of the remaining forces. From this need sprang the AEF concept.

During the Gulf War the 133 USAF aircraft in Turkey, designated Joint Task Force Proven Force, operated as a composite force, rather than as separate wings. Thanks to the developed infrastructure of its main operating station, Incirlik AB, Proven Force maintained a readiness rate that equaled or exceeded that of non-composite wings operating from the states of the Persian Gulf. Proven Force not only successfully carried out its attacks on northern Iraq, but its composite structure apparently allowed it to coordinate its operations very efficiently. The key to such coordination was the art of force packaging, which is the construction of an air attack with aircraft suitable for the mission. This is more complicated than it appears, for the force planner must include in a single package aircraft that will strike the target; aircraft that will protect the strikers from enemy aircraft; and electronic warfare aircraft that will shield all the aircraft in the package from enemy ground-to-air missiles and anti-aircraft artillery. The package may also require coordination with tankers, aircraft to jam enemy radars, and aircraft, such as AWACS or ABCCC, that control aircraft in flight. A composite force can do this quickly and efficiently with a single commander on a single base. This ability gives a composite force a significant advantage over a force depending on the pack-

aging of attacks with aircraft under different commanders operating from widely separated bases.

The Air Force Chief of Staff at the end of the Gulf War, General Merrill A. McPeak, had been an advocate of composite forces even before his appointment as Chief. The performance of JTF Proven Force confirmed his belief in the efficacy of such composite units. He directed the formation of two composite wings to thoroughly test the concepts of mixed-aircraft operations, one of which, the 366th, at Mountain Home AFB, Idaho, is currently operating. The experience of the 366th Wing provides a valuable practical, theoretical, and continuing underpinning for the AEF concept. As a further test of the composite wing, 366th itself served as lead element for an AEF that deployed to Bahrain, from February to October 1997.

Unfortunately, a permanent mixed-aircraft wing suffers from a disadvantage that the temporary AEF does not. In terms of logistics it is more expensive to support because it does not have the economy of scale of that of a same-type wing. Three or more types of aircraft at a single location means supplying equipment and facilities, on one base, to maintain not only three disparate airframes and engines, but the skills of three types of aircraft pilots and ground crews, and unique ground support equipment. In an era of constant budget reductions (in terms of real dollars) a mixed-aircraft wing may be simply too expensive. On the other hand, a constant of military life is that men and women must have a basic unit to which they can strongly identify, otherwise their efficiency suffers. This is especially important in time of war, when the unit may be the only family and comfort available. As the Air Force continues to implement the AEF concept the ad hoc nature of the units in its deployments may have an adverse effect on unit cohesion and identification, particularly for the ground crews. This is an issue that may have to be addressed at some future point.

The notion of a quick reaction air power package has been current for at least 40 years and found a concrete expression in TAC's creation of the Nineteenth Air Force. It seems appropriate, therefore, that the AEF concept appears to have originated in the successor to TAC, the USAF's Air Combat Command (ACC). Sometime in the fall of 1994, shortly after assuming command of the ACC's Ninth Air Force—the air component of the U.S. Central Command (CENTCOM)—Lt. Gen. John P. Jumper began to circulate the AEF concept throughout his command and ACC, where it received a favorable reception. General Jumper's previous assignment as Special Assistant to the Air Force Chief of Staff for Roles and Missions had immersed him in the difficulties facing the U.S. military in defining its role in the post-Cold War era. The assignment brought home to him the necessity for change in the Air Force's thinking about its traditional tasks.

As commander of the Ninth Air Force, he also faced a practical problem in his role as head of CENTCOM's air component. As the joint

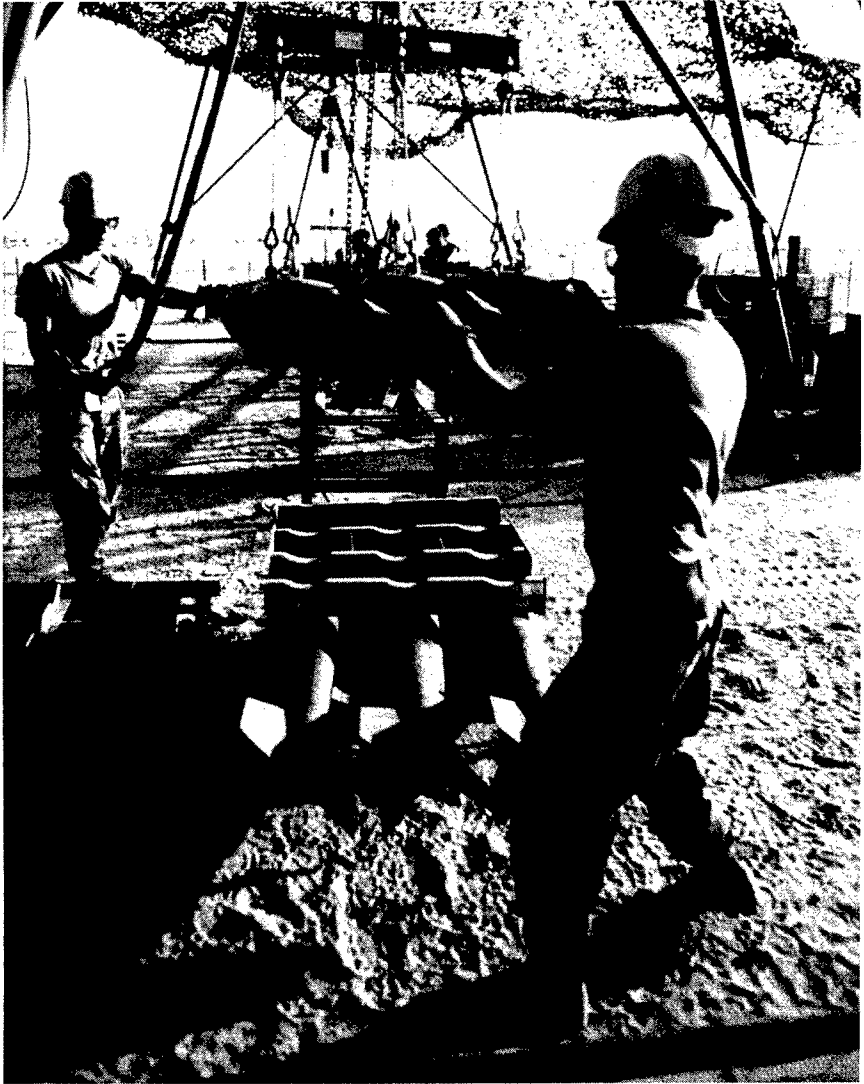
command responsible for Southwest Asia, including the Persian Gulf, CENTCOM enforced the U.N. no-fly zones over northern and southern Iraq (Operations Northern and Southern Watch), a task which employed both Air Force and Navy aircraft. However, as part of the Navy's normal rotation of its aircraft carriers for rest, maintenance, and replenishment (a process which at any one time puts approximately one-third of the fleet's carriers off their duty stations) the Navy scheduled the *U.S.S. Independence* for withdrawal from its CENTCOM duty, at the end of October 1995. It could not replace the carrier for a period of up to six weeks. This left CENTCOM short of its required air strength, forcing General Jumper to consider means to temporarily fill this "carrier gap" with USAF assets. This thinking formed the basis of the current AEF concept. Since a Navy carrier wing consisted of several different types of aircraft, which gave it the capability of confronting a wide spectrum of threats, its replacement USAF force would have to be tailored to the same capabilities. The Ninth Air Force calculated that it could fill the carrier gap with 36 USAF aircraft: 12 F-15Cs (air-to-air fighters), 12 F-16Cs (precision munition capable multi-role fighters equipped with advanced navigation and targeting pods), 6 HTS F-16Cs (suppression of enemy air defense fighters equipped with high-speed anti-radiation missiles [HARMS]), and 6 B-52s (on alert in CONUS). This force structure required a departure from standard USAF deployment routines, which called for aircraft to move forward in their basic combat unit, a squadron (usually 24 aircraft) of the same type of aircraft. The deployment would also be of short duration, probably no more than 60 days, which for reasons of economy required a small footprint to minimize airlift and other costs. The Ninth Air Force presented this concept to the Commander of ACC and the Chief of Staff of the Air Force, who approved it.

From his position as head of Central Command Air Forces (CENTAF) General Jumper offered the concept to his CINC, who accepted it and asked for its employment. In due course the Chairman of the Joint Chiefs of Staff directed ACC to deploy an AEF to Bahrain not later than October 19, 1995, and for no more than 120 days. After some last minute changes, 18 F-16s deployed to Shaikh Isa Air Base on October 28, 1995. AEF I arrived fully armed and began to fly sorties within 12 hours of its initial landings. The AEF returned to the U.S. on December 18. AEF I deployed 576 people and flew 673 sorties. Gen. Joseph W. Ralston, at that time the Commander of ACC, noted:

As we look to the future, we can expect to see the Air Expeditionary Force concept used more frequently because it's economical, practical and it embraces any mix of aircraft. Because we can project sustainable combat capable air power so rapidly, we can reduce the number of people we have deployed. In turn we reduce our overall operations tempo, and we reduce how much we spend. The AEF is more cost effective and, from the

theater commander's perspective, it's a responsive, lethal package that gives almost immediate results.

General Jumper continued to advocate the widest possible implementation of the AEF concept after leaving the Ninth Air Force to become the USAF Deputy Chief of Staff for Air and Space Operations (June 1996 to November 1997) and as commander, U.S. Air Forces in Europe. Of



Using pre-positioned munitions, bomb handlers can help an AEF to sustain its operations.

course, General Jumper was not the sole force behind of the AEF concept. Others also championed the idea. Maj. Gen. Ronald E. Keys, as commander of the 53rd Fighter Wing (the successor to the Air Warfare Center at Eglin AFB, Florida) and as commander of the USAF Doctrine Center (Maxwell AFB, Alabama), helped to popularize the concept and suggested ways in which it could be implemented. Also, Gen. Michael E. Ryan, as commander of U.S. Air Forces in Europe employed AEFs for Bosnia and elsewhere, and as Chief of Staff of the Air Force completely committed his service to the concept.

In 1996 CENTAF deployed additional AEFs to Southwest Asia. AEF II went to the Kingdom of Jordan to cover a carrier gap scheduled for May 14 through June 24. On March 30, 1996, a C-17 load of personnel and supplies landed at Shaheed Mwaffag Air Base, Jordan, and promptly began erect a tent city and support infrastructure. More airlift brought in a total of 151 engineering personnel, 88 construction personnel, 51 communications support personnel, and 9 medical personnel. Diversion of airlift to support operations in conjunction with the fatal crash of Secretary of Commerce Ron Brown's CT-43 and humanitarian operations in Liberia (Operation Assured Response), forced rerouting and rescheduling of air transport, but did not affect the deployment of AEF II. AEF II's aircraft (30 fighters and 4 tankers) landed in Jordan on April 12, twenty-four hours after initial notification. They proceeded to fly sorties in support of Operation Southern Watch within a day. AEF II deployed 1,150 personnel and flew 918 sorties. On June 28, 1996 AEF II's fighters returned to the U.S.

On April 8, 1996, CINCCENT requested that another AEF be sent to Qatar in order to further validate U.S. capability to rapidly reinforce its troops in Southwest Asia. This force would also participate in combined operations with U.S. partners in the Persian Gulf and conduct maritime operations with naval forces in the Gulf. On April 17, the Chairman of the Joint Chiefs of Staff, with the approval of the Secretary of Defense, ordered the deployment of AEF III to Qatar. The first portion of AEF III, 12 F-15Cs already stationed in the Gulf, flew into Doha, Qatar, on June 24, 1996. Eight days later, July 2, F-15Es and F-16Cs deployed from the U.S. for a total of 34 fighters, 4 tankers, and 1,200 personnel deployed. The aircraft from the U.S. flew sorties in support of Southern Watch the day they arrived. AEF III conducted a total of 1,323 sorties. In addition to the aircraft in the theater, 3 B-52Hs and 3 B-1Bs were on permanent call in CONUS. AEF III redeployed to the U.S. on August 20, 1996. During its stay, it became the first AEF to stage a Global Power mission when two of its on-call B-52Hs, flying a round trip from Barksdale AFB, Louisiana, dropped 27 Mk-117 bombs on the Udari Weapons Range, Kuwait.

In all, AEFs I, II, and III performed 13 percent of all sorties supporting CENTCOM during their respective tours of duty. Each left behind equipment and a minimum infrastructure to support a future AEF. In order



F-16s will form part of almost all AEFs.

to ease planning requirements, to maintain ties with host nation armed services, and to lessen family support problems CENTAF/Ninth Air Force has permanently assigned three of its units, (the 1st Fighter Wing at Langley, the 347th Fighter Wing at Moody, and the 4th fighter Wing Seymour Johnson AFBs) to supply the core or lead units for AEFs destined for Jordan, Bahrain, and Qatar, respectively.

Two additional AEFs were planned for Southwest Asia in 1996. AEF V was cancelled, while the fighter portions of AEF IV were cancelled shortly before deployment. The B-52 contingent of AEF IV became part of Operation Desert Strike, a punitive strike on Iraq in retaliation for its attacks on Kurds protected by the U.N. On September 3, 1996, as part of a non-stop flight of 33.9 hours and 13,600 miles, from Andersen AFB, Guam, these bombers launched 13 conventional Air Launched Cruise Missiles against targets in Iraq.

In 1997 CENTAF sponsored two more AEFs, one deployed to Bahrain in February and, because of continuing provocations from Iraq concerning U.N. weapons inspection teams, stayed until October. A second AEF, also sent to Bahrain, replaced the previous AEF. In early March 1998, after the U.N. Secretary General and Iraq came to an arms inspection agreement acceptable to the U.S., the government of Bahrain requested that this force be withdrawn.

The AEF concept has been defined and practiced, but it has not yet been fully realized. Much remains to be done and a November 1997 study by the USAF Scientific Advisory Board pointed the way for much of the remaining work. The report recommended the fielding of a small bomb

system, increased emphasis on distributed headquarters structures, the establishment of regional logistics and maintenance centers, greater effort on air base defense, rapid development of enhanced information systems, and improving aircraft engine reliability and maintenance. The fielding of a 250-pound smart bomb would greatly reduce airlift requirements, while the other suggested initiatives would shrink the AEF's footprint, ease logistics concerns, and lower the number of aircraft sorties lost to maintenance difficulties.

Much of the nuts and bolts work of implementing the AEF concept will come from the AEF Battlelab, located at Mountain Home AFB, the site of the USAF's only permanent composite wing. The Battlelab, established in 1997, is neither a research laboratory or an air warfare center. It is meant to manage ideas, rather than programs or projects. Its tasks are to prove AEF operations and logistics concepts; drive revisions in service doctrine, training, requirements, and acquisitions; and identify initiatives and innovative ideas that will reduce an AEF's footprint and response time or increase its capability and effectiveness. In creating the AEF Battlelab the Air Force has taken another significant step towards institutionalizing change in its culture and its way of doing business.

The image of the Roman Legion has become fixed in the Western mind as the epitome of a faithful and professional military force which served as the doughty defender of the *Pax Romanum*. Although by no means perfect or exempt from defeat, it met the military requirements of its time and place. Likewise the British Royal Navy established a reputation as a technologically advanced, well-trained service and as a hardy defender of the *Pax Britannica*. Both of these instruments of military force served as the world policemen of their time. Today, in what may in the future be termed the era of the *Pax Americana*, the United States, in the form of the AEF, has the opportunity to create an expeditionary system of equal honor and reputation. May it last for at least as long as these predecessors.